

FIG. 1

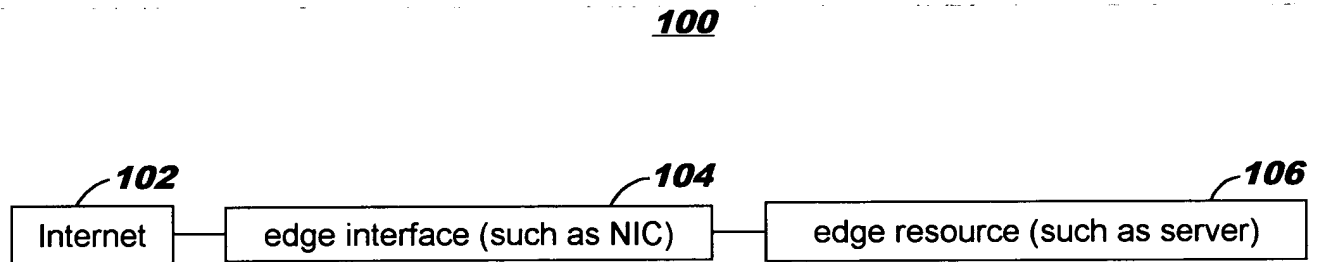


FIG. 2

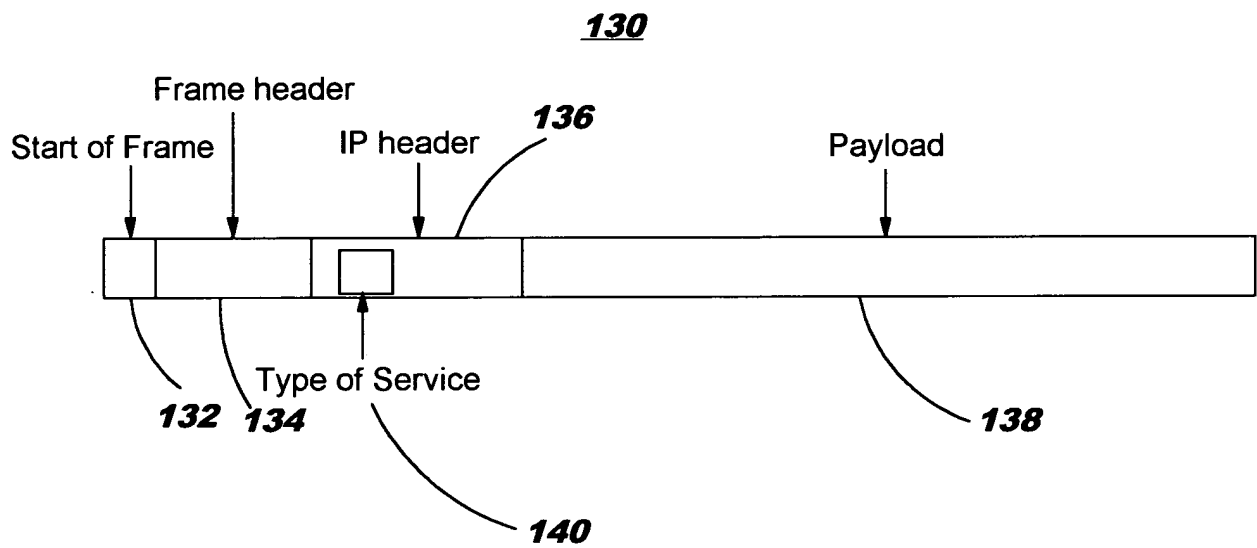


FIG. 3

150

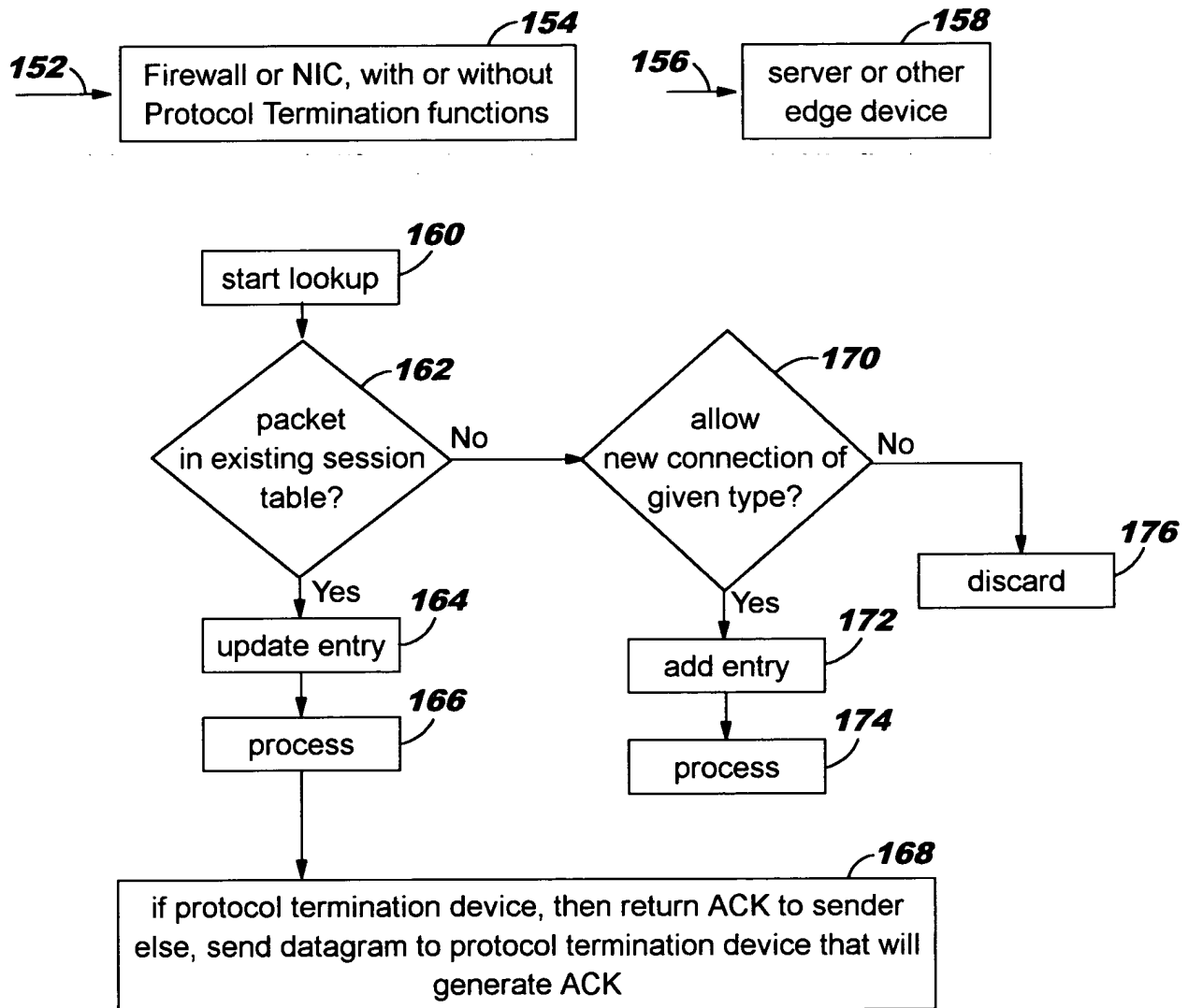


FIG. 4

200

low speed

Connection min and max values, pipe identifiers initialized in NIC

moderate speed

Current connection numbers and congestion signals collected and made available to algorithm

Algorithm refreshes probability of connection for different classes of service

high speed

New sessions request connections and connection decisions made

FIG. 5

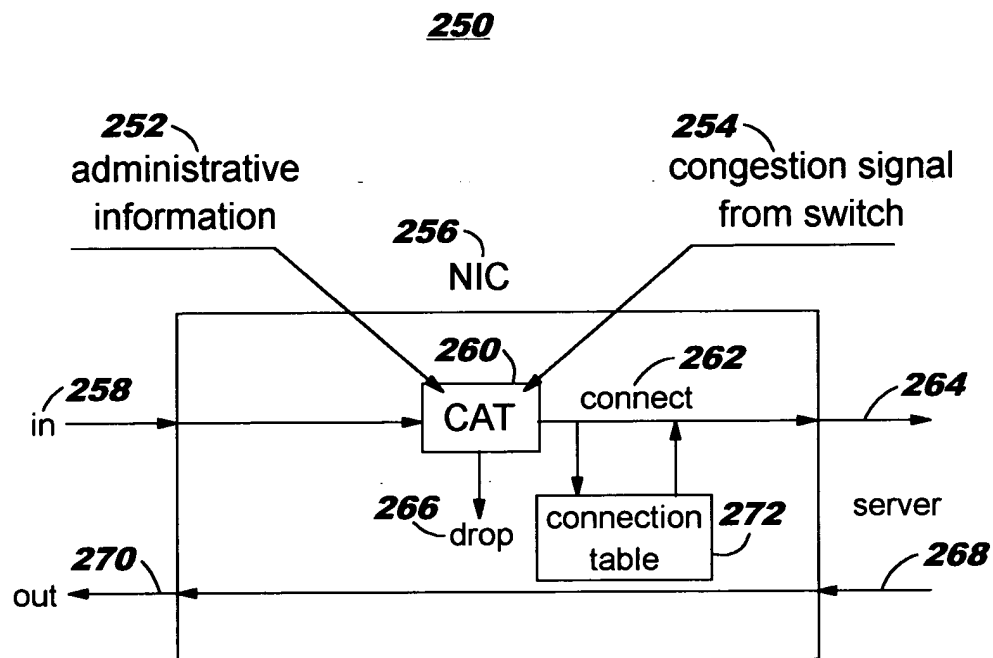


FIG. 6

300

1. min and max numbers of connections declared by administrator
2. coordinates of paths of traffic classes declared
3. paths using a common NIC source port collected in a set
4. C_i and D_i coefficients computed for each pipe
5. C_i and D_i entered in registers used in CAT calculation
6. congestion signals defined using path coordinates and resource limits

FIG. 7

400

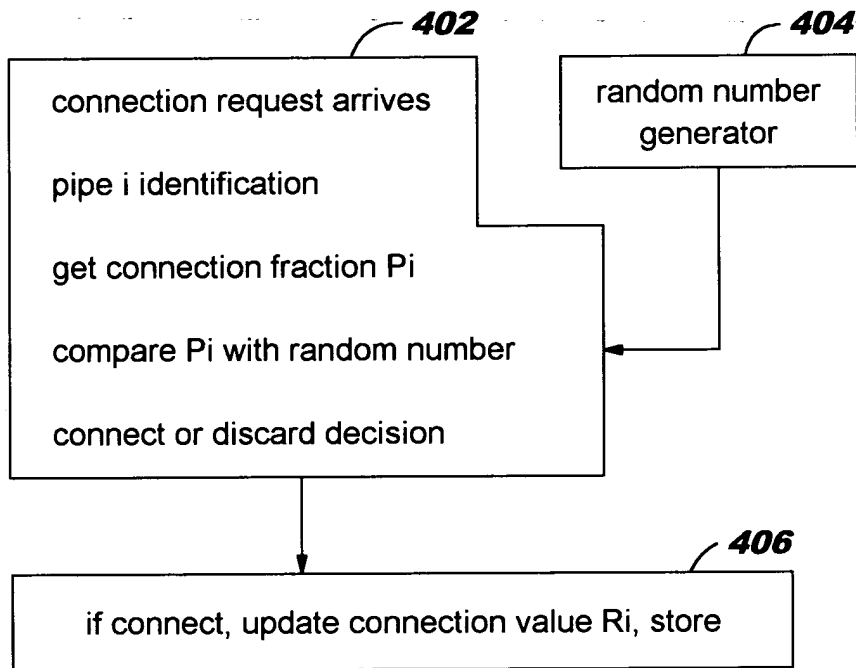


FIG. 8

450

NIC with CAT

Update connection probability table

Timer awakens program with period D_t

Fetch B , E values from registers

Update E and store

Fetch R_i , C_i , D_i , P_i values from registers

Update P_i for each i and store in table of P_i values

FIG. 9

500

CAT connection control refreshes
connection fractions P_i for pipes

Timer with period Dt awakens CAT.

New connection fractions computed per pipe.

Results stored in a table.

pipe number i	Connection fraction P_i

502

504

506